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PREDICTORS OF EARLY, LATE AND VERY LATE STENT THROMBOSIS FROM THE SPIRIT II, SPIRIT III, SPIRIT IV AND COMPARE POOLED DATA BASE

i2 Poster Contributions
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Background: No individual trial between XIENCE V everolimus eluting stent (EES) and TAXUS paclitaxel eluting stent (PES) has been adequately powered to examine the predictors of stent thrombosis (ST). We therefore analysed ST rates for predictors from a large pooled-database of 4 randomised trials.

Methods: Baseline clinical, angiographic and procedural data from the SPIRIT II, III, IV and COMPARE trials, each of which randomized patients (pts) to EES or PES, were pooled in a database of 6,788 pts. Early (0-30 days), late (30 days-1 yr), very late (1-2 yr) and overall (0-2 yr) definite or probable (def/prob) ARC defined ST rates were calculated and Cox proportional hazard regression models were used to identify the baseline predictors. Seventeen patient and procedural covariates were analyzed.

Results: Pts with compared to those without def/prob ST were significantly ($p<0.05$) more younger, active smokers, have hyperlipidemia, prior PCI and CABG, NSTEMI at admission, have more stents, lesions, vessels, occlusions, grafts, complex, thrombus and longer lesions treated and less gain by QCA. Only active smoking and the use of PES rather than EES were significant predictors of ST during the early, late and very late phases. Table shows predictors and rates of def/prob ST in PES and EES.

Conclusions: In this large pooled analysis, active smoking, prior PCI and MI, DM, multivessel treatment and younger age were significant predictors for def/prob ST, whereas the use of EES was the major predictor for freedom from ST.

	EES (n=4247)	HR (95% C.I.)	p-value	PES (n=2541)	HR (95% C.I.)	p-value
ST (0-730 d)	0.7%			2.3%	0.30 [0.19,0.47]	<0.0001
Predictors	Prior PCI	3.99 [1.72, 9.28]	0,002	Smoking	2.18 [1.24, 3.82]	0,007
	DM, all	3.75 [1.70, 8.28]	0,002	Prior MI	2.15 [1.19, 3.89]	0,02
	Prior MI	2.44 [1.05, 5.66]	0,04	Stent length	1.14 [1.07, 1.21]	<0.0001
	MV ≥ 2	2.43 [1.09, 5.43]	0,03	Age	0.67 [0.51, 0.88]	0,004
Early ST	0.2%			1.0%	0.21 [0.10,0.46]	<0.0001
Predictors	N/A			Smoking	2.98 [1.34, 6.64]	0,008
				Stent length	1.15 [1.05, 1.26]	0,004
Late ST	0.2%			0.6%	0.38 [0.17,0.88]	0.02
Predictors	Prior PCI	23.71 [4.51,124.6]	0,0002	Age	0.40 [0.24, 0.68]	0,0007
	DM, all	8.09 [1.66,39.37]	0,01			
Very Late ST	0.3%			0.8%	0.31 [0.14,0.67]	0.002
Predictors	Prior PCI	5.88 [1.70,20.31]	0,006	Stent length	1.19 [1.09, 1.30]	0,0002
				Age	0.61 [0.39, 0.95]	0,03